

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

July 12, 2021

Ron Hensley, P.E.
THE Group
300 Branding Iron Rd. SE
Rio Rancho, NM 87124

**RE: SAMS Academy
6441 Ventana Rd. N.W.
Grading & Drainage Plan
Engineer's Stamp Date: 06/10/21
Hydrology File: A10D010**

Dear Mr. Hensley:

PO Box 1293

Based upon the information provided in your submittal received 06/11/2021, the Grading & Drainage Plans are approved for Building Permit, Grading Permit and action by the DRB on Site Plan for Building Permit.

Albuquerque

Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

NM 87103

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

www.cabq.gov

Please provide Drainage Covenant for the detention pond and stormwater quality pond per Article 6-15(C) of the DPM prior to Permanent Release of Occupancy. Please submit an electronic file of the Covenant and Exhibit for completeness to Marion G. Velasquez at mgvelasquez@cabq.gov. Once the electronic file is approved for completeness, please submit the original copies along with the \$ 25.00 recording fee check made payable to Bernalillo County to Marion on the 4th floor of Plaza de Sol. Please note that Hydrology will need a pdf copy of the recorded Drainage Covenant prior to Hydrology's approval of Permanent Release of Occupancy.

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: SAMS Academy **Building Permit #:** _____ **Hydrology File #:** B10D010
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: TRACT A-2 BULK LAND PLAT FOR TRACTS A-1 & A-2 (A REPLAT OF TRACT A, VENTANA RANCH)
City Address: 6441 VENTANA RD. N.W.

Applicant: THE Group **Contact:** Ron Hensley
Address: 300 Branding Iron Rd. SE, Rio Rancho, NM 87124
Phone#: 505-410-1622 **Fax#:** _____ **E-mail:** ron@thegroup.cc

Owner: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

TYPE OF SUBMITTAL: _____ PLAT (____ # OF LOTS) _____ RESIDENCE ☒ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL?: ☒ Yes _____ No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION ☒ HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
- ☒ GRADING PLAN
- ☐ DRAINAGE MASTER PLAN
- ☐ DRAINAGE REPORT
- ☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ OTHER (SPECIFY) _____
- ☐ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

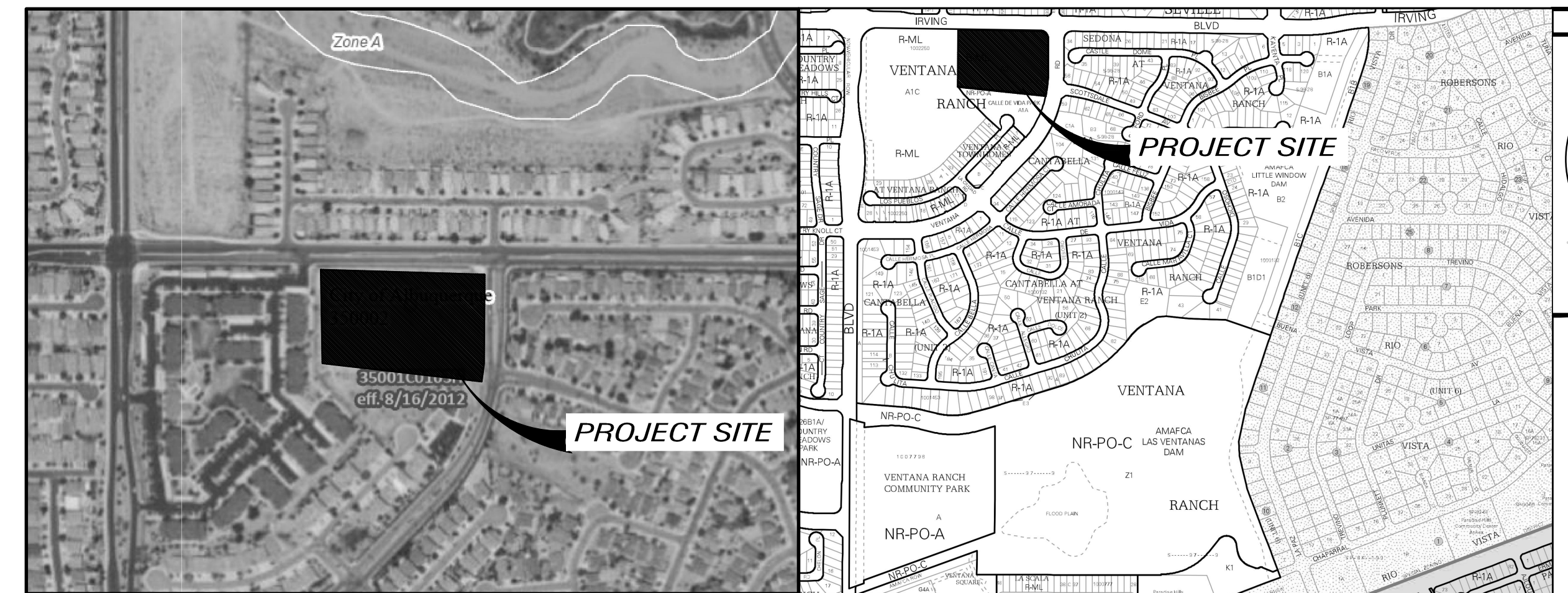
- ☒ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ SITE PLAN FOR SUB'D APPROVAL
- ☒ SITE PLAN FOR BLDG. PERMIT APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
- ☐ FOUNDATION PERMIT APPROVAL
- ☒ GRADING PERMIT APPROVAL
- ☐ SO-19 APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ GRADING/ PAD CERTIFICATION
- ☐ WORK ORDER APPROVAL
- ☐ CLOMR/LOMR
- ☐ FLOODPLAIN DEVELOPMENT PERMIT
- ☐ OTHER (SPECIFY) _____

DATE SUBMITTED: 6/11/21 **By:** THE Group / Ron Hensley

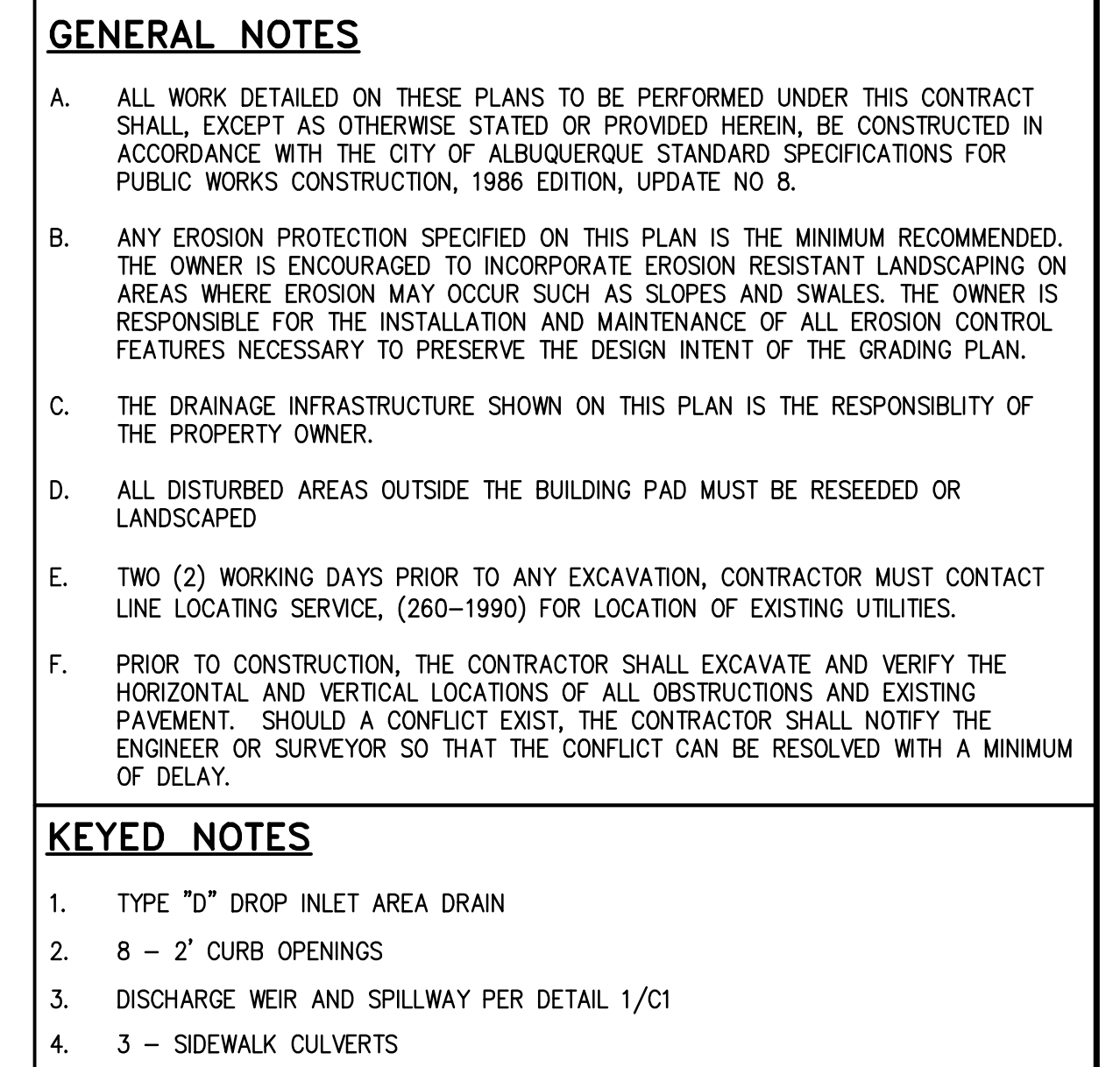
COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



VICINITY MAP B-10-Z



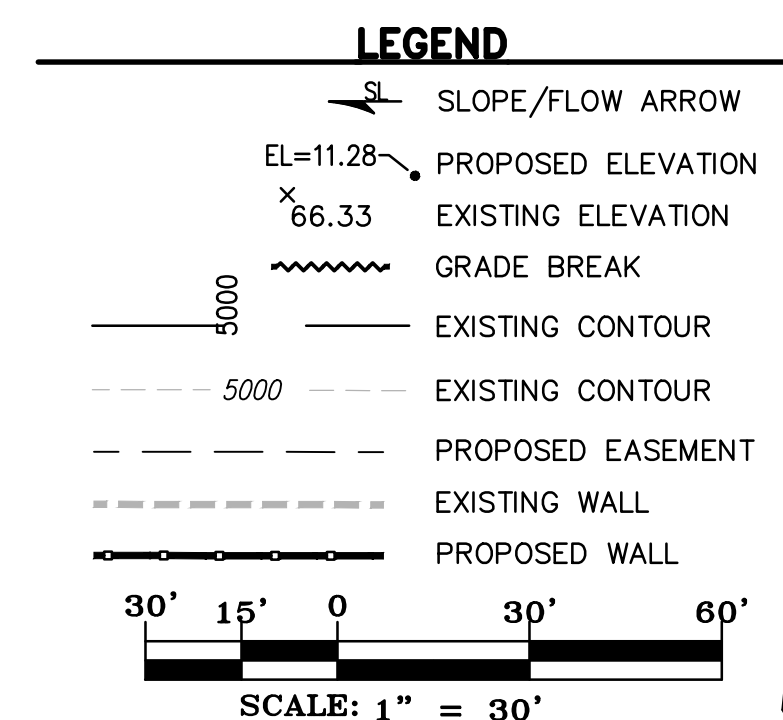
City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 07/12/21
BY: *Ricardo C. Briswell*
HydroTrans # A100010

THE APPROVAL OF THESE PLANS/DRAWINGS SHALL NOT BE
CONSIDERED TO PERMIT VIOLATION OF ANY CITY
ORDINANCE OR STATE LAW, AND SHALL NOT BE PERMIT
THE CITY OF ALBUQUERQUE TO BE RESPONSIBLE FOR
CORRECTIONS, OR ERRORS OR OMISSIONS IN PLANS,
SPECIFICATIONS, OR ANY OTHER APPLICABLE PLANS
SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT
AUTHORIZATION.

CONSTRUCTION NOTES

- THE ENGINEER HAS UNDERTAKEN LIMITED FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UNDERGROUND UTILITY LINES. MAKES NO REPRESENTATION PERTAINING THERETO AND ASSUMES NO LIABILITY OR RESPONSIBILITY FOR THE ACCURACY OF THE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY HIS FAILURE TO LOCATE, IDENTIFY, AND PRESERVE ANY AND ALL EXISTING UTILITIES. THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS PERTAINING TO THE LOCATION OF UTILITIES AND FACILITIES IN PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITIES, COMPLYING WITH "BLUE STAKES" PROCEDURES, OR OTHERWISE.
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.
- THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, ARE INTENDED FOR USE ON THIS PROJECT AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF THE GROUP. IN THE EVENT OF UNAUTHORIZED USE, THE USER ASSUMES ALL RESPONSIBILITY AND LIABILITY WHICH RESULTS.

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THE
group
THE HENSLEY ENGINEERING GROUP
300 BRANDING IRON RD. SE
RIO RANCHO, NEW MEXICO 87124
Phone:(505) 410-1622

DEVELOPMENT MANAGEMENT CONSULTANTS

PROFESSIONAL CONSTRUCTION MANAGERS & CONSULTING ENGINEERS

9320 Menaul Blvd. NE, ste. D
Albuquerque, NM 87112

DMC Office: (505) 296-7100
Fax: (505) 296-7105

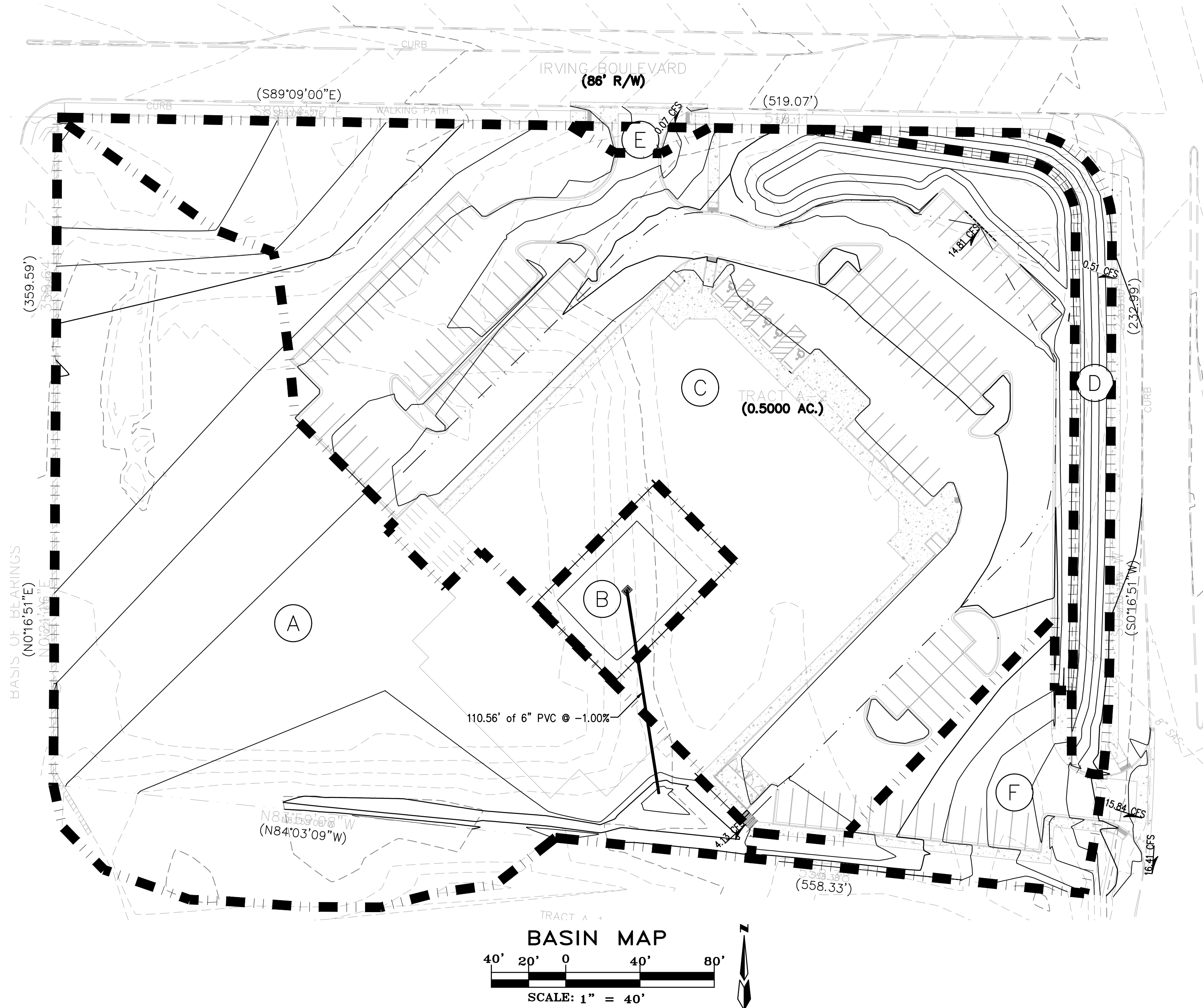
6441 VENTANA RD. N.W.
ALBUQUERQUE, NM

GRADING PLAN

PROJECT NAME: SAMS ACADEMY

-PROJECT NUMBER-
-PROJECT PROGRESS-
PERMIT
-DRAWN BY-
REH
CHECKED BY: / -APPROVED BY-
REH / REH
-DATE-
JUNE 10, 2021
-SCALE-
AS NOTED
-SHEET-

C 1



DRAINAGE INFORMATION

LOCATION & DESCRIPTION

THE PROPOSED SITE IS AN UNDEVELOPED TRACT AT THE INTERSECTION OF IRVING BLVD. AND VENTANA RD. THAT HAS BEEN PREVIOUSLY GRADED..

FLOODPLAIN STATUS

THIS PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C0103H, DATED AUGUST 16, 2012 IS NOT WITHIN A DESIGNATED 100-YEAR FLOODPLAIN.

EXISTING DRAINAGE

THE SITE DRAINS TO VENTANA RD. AND IS WITHIN THE AREA OF THE MASTER DRAINAGE PLAN OF "B10003A - SEDONA SUBDIVISION PHASE 2" AND IS RESTRICTED TO THE DISCHARGE RATES DEFINED IN THAT REPORT. BASIN A-1 OF THE REPORT CONTAINS THE SITE AND IS RESTRICTED TO A DISCHARGE 3.93 CFS/ACRE.

DEVELOPED CONDITION

THE SITE WILL BE IMPROVED WITH A SCHOOL. THE MAJORITY OF THE SITE RUNOFF (BASIN A) WILL BE ROUTED TO THE POND DEPICTED TO RESTRICT DISCHARGE FROM THIS SUB-BASIN TO 15.61 CFS DISCHARGED TO VENTANA RD. DISCHARGE FROM THE POND WILL BE CONTROLLED WITH A CHANNEL WIER AND COMBINED WITH THE REMAINING RUNOFF FOR A PEAK FLOW OF 16.28 CFS.

METHODOLOGY

THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING THE WEIGHTED E METHOD..

PRECIPITATION

THE 100-YR 6-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 1 AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, CHAPTER 6.

EQUATIONS:

WEIGHTED E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d / (\text{Total Area})$

FLOW = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

TABLE 6.2.13 EXCESS PRECIPITATION, E (IN.) - 6 HOUR STORM				
Zone	A	B	C	D
1	0.55	0.73	0.95	2.24
	[0.00, 0.08]	[0.01, 0.22]	[0.12, 0.44]	[0.72, 1.24]

TABLE 6.2.14 PEAK DISCHARGE (CFS/ACRE)				
Zone	A	B	C	D
1	1.54	2.16	2.87	4.12
	[0.00, 0.24]	[0.03, 0.76]	[0.47, 1.49]	[1.69, 2.89]

BASIN	AREA (sf)	TREATMENT A % sf	TREATMENT B % sf	TREATMENT C % sf	TREATMENT D % sf	WEIGHTED E	T _B	T _P	VOLUME (cu.-ft.)	FLOW (cfs)	ALLOWED FLOW	CFS/AC (cfs)	ALLOWED (cfs/ac)
EXISTING A	81318	100% 81318	0% 0	0% 0	0% 0	0.5500	0.7525	0.2733	3727	2.87	7.34	1.54	3.93
PROPOSED A	81318	15% 12198	85% 69120	0% 0	0% 0	0.7030	0.7166	0.2733	4764	3.86	7.34	2.07	3.93

BASIN	AREA (sf)	TREATMENT A % sf	TREATMENT B % sf	TREATMENT C % sf	TREATMENT D % sf	WEIGHTED E	T _B	T _P	VOLUME (cu.-ft.)	FLOW (cfs)	ALLOWED FLOW	CFS/AC (cfs)	ALLOWED (cfs/ac)		
EXISTING B	5513	100%	5513	0%	0	0%	0	0.5500	0.7525	0.2733	253	0.19	0.50	1.54	3.93
PROPOSED B	5513	0%	0	100%	5513	0%	0	0.7300	0.7121	0.2733	335	0.27	0.50	2.16	3.93

BASIN	AREA (sf)	TREATMENT A % sf	TREATMENT B % sf	TREATMENT C % sf	TREATMENT D % sf	WEIGHTED E	T _B	T _P	VOLUME (cu.-ft.)	FLOW	ALLOWED FLOW	CFS/AC (cfs)	ALLOWED (cfs/ac)				
EXISTING C	121780	100%	121780	0%	0	0%	0	0.5500	0.7525	0.2733	5582	4.31	10.99	1.54	3.93		
PROPOSED C	121780	0%	0	15%	18764	0%	0	85%	103016	2.0073	0.8963	0.2028	20371	10.67	10.99	3.82	3.93

BASIN	AREA (sf)	TREATMENT A % sf	TREATMENT B % sf	TREATMENT C % sf	TREATMENT D % sf	WEIGHTED E	T _B	T _P	VOLUME (cu.-ft.)	FLOW (cfs)	ALLOWED FLOW	CFS/AC (cfs)	ALLOWED (cfs/ac)
EXISTING D	7706	100% 7706	0% 0	0% 0	0% 0	0.5500	0.7525	0.2733	353	0.27	0.70	1.54	3.93
PROPOSED D	7706	0% 0	0% 0	100% 7706	0% 0	0.9500	0.6974	0.2733	610	0.51	0.70	2.87	3.93

BASIN	AREA (sf)	TREATMENT A % sf	TREATMENT B % sf	TREATMENT C % sf	TREATMENT D % sf	WEIGHTED E	T _B	T _P	VOLUME (cu.-ft.)	FLOW (cfs)	ALLOWED FLOW	CFS/AC (cfs)	ALLOWED (cfs/ac)		
EXISTING E	706	100%	706	0%	0	0%	0	0.5500	0.7525	0.2733	32	0.02	0.06	1.54	3.93
PROPOSED E	706	0%	0	0%	0	100%	706	2.2400	0.8956	0.1900	132	0.07	0.06	4.12	3.93

BASIN	AREA (sf)	TREATMENT A % sf	TREATMENT B % sf	TREATMENT C % sf	TREATMENT D % sf	WEIGHTED E	T _B	T _P	VOLUME (cu.-ft.)	FLOW (cfs)	ALLOWED FLOW	CFS/AC (cfs)	ALLOWED (cfs/ac)
EXISTING F	11838	6% 706	0% 0	0% 0	0% 0	0.5500	0.7525	0.2733	543	0.42	1.07	1.54	3.93
PROPOSED F	11836	0% 0	0% 0	25% 2972	75% 8864	1.9161	0.8735	0.2109	1890	1.03	1.07	3.81	3.93

BASIN	AREA (sf)	TREATMENT A		TREATMENT B		TREATMENT C		TREATMENT D		WEIGHTED E	VOLUME (cu.-ft.)	FLOW (cfs)	ALLOWED FLOW (cfs)	CFS/AC (cfs)	ALLOWED (cfs/ac)
		%	sf	%	sf	%	sf	%	sf						
EXISTING	228859	100%	228859	0%	0	0%	0	0%	0	0.62	11824	8.98	20.65	1.71	3.93
PROPOSED A	81318	15%	12198	85%	69120	0%	0	0%	0	0.70	4764	3.86	7.34	2.07	3.93
PROPOSED B	5513	0%	0	100%	5513	0%	0	0%	0	0.73	335	0.27	0.50	2.16	3.93
PROPOSED C	121780	0%	0	15%	18764	0%	0	85%	103016	2.01	20371	10.67	10.99	3.82	3.93
SUB. TOT.	208611	6%	12198	45%	93397	0%	0	49%	103016	1.55	25470	14.81	18.82	3.09	3.93
PROPOSED D	7706	0%	0	0%	0	100%	7706	0%	0	0.95	610	0.51	0.70	2.87	3.93
PROPOSED E	706	0%	0	0%	0	0%	0	100%	706	2.24	132	0.07	0.06	4.12	3.93
PROPOSED F	11836	0%	0	0%	0	25%	2972	75%	8864	1.92	1890	1.03	0.50	2.16	3.93
PROP. TOT.	228859	5%	12198	41%	93397	5%	10678	49%	112586	1.55	28102	16.41	20.08	3.12	3.93

HYDRAULICS

SIDEWALK CUVERT OR 2' CURB OPENING			
$Q = CLH^{3/2}$			
C	WIDTH (L) (ft.)	DEPTH (H) (ft.)	FLOW (Q) (cfs)
2.7	2	0.5	1.91

DISCHARGE WEIR			
$Q = CH^{2.5} C = 2.54 \cdot \tan(139^\circ/2)$			
C	WIDTH (L) (ft.)	DEPTH (H) (ft.)	FLOW (Q) (cfs)
6.78	7.35	1.37	14.81

REQUIRED WATER QUALITY VOLUME

SITE DRAINAGE AS DEPICTED ON THIS PLAN SHALL BE MAINTAINED.

SITE DEPICTED HEREON SHALL BE RESPONSIBLE FOR MAINTAINING WATER QUALITY RUNOFF RETENTION ON THE SITE IMMEDIATELY PRIOR TO DISCHARGE. THE VOLUME SHALL BE EQUAL TO: IMPERVIOUS AREA * 0.42/12 IN CUBIC FEET.

IMPERVIOUS AREA = 112,586 SQ.FT.
REQUIRED VOLUME = 112,586 * 0.42/12 = 3,941 CU.FT.
VOLUME PROVIDED = 4,541 CU.FT.



THE group

THE HENSLEY ENGINEERING GROUP
300 BRANDING IRON RD. SE
RIO RANCHO, NEW MEXICO 87124
Phone: (505) 410-1622

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DMC

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Fax: (505) 296-7105

RON E. HENSLEY
NEW MEXICO
21850
Professional Engineer
6/10/21

1. THIS SET OF DRAWINGS EXIST AS A WHOLE. IF THE SOLE CONTRACTOR INVOLVED IN THE DRAWINGS AS SUCH, EACH SHEET SHALL BE RESPONSIBLE TO THEIR RESPECTIVE DISCIPLINES.
2. DUE TO POTENTIAL INCONSISTENCIES DURING PLAN INCORPORATION, THE DRAWING TO BE USED SHALL BE THE LATEST DRAFTING TO VERIFY OR DESIGN DIMENSIONS IS NOT RECOMMENDED.

PROJECT ADDRESS:
6441 VENTANA RD. N.W.
ALBUQUERQUE, NM

CLIENT'S NAME:
SAMS ACADEMY

DRAINAGE VALUES
DRAINAGE PLAN

PROJECT NUMBER:
PROJECT PROGRESS:
PERMIT

DRAWN BY:
REH

CHECKED BY:
REH / APPROVED BY:
REH

DATE:
JUNE 10, 2021

SCALE:
AS NOTED

SHEET:
D1